DISTRIBUTION A:
Approved for public release; distribution is unlimited.

The Balkans Air Campaign Study: Part 2

COL ROBERT C. OWEN, USAF

Part 1 appeared in the Summer 1997 issue of Airpower Journal.

Execution

GIVEN THE protracted political and military run up to it, the actual start of DELIBERATE FORCE was almost anticlimactic. The specific "trigger event" for the campaign was the explosion of a mortar bomb in Sarajevo's Mrkale Marketplace that killed 37 people on the morning of 28 August 1995. In the normal course of events for the unfortunate city, a mortar explosion was unremarkable, but this one caused exceptional and immediately televised bloodshed. Further, its timing made an interventionist response virtually certain.

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE **1997**	2. REPORT TYPE	3. DATES COVERED **00-00-1997 to 00-00-1997**
4. TITLE AND SUBTITLE **The Balkans Air Campaign Study: Part 2**		5a. CONTRACT NUMBER
		5b. GRANT NUMBER
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)		5d. PROJECT NUMBER
		5e. TASK NUMBER
		5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **Air and Space Power Journal,155 N. Twining Street,Maxwell AFB,AL,36112-6026**		8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)
12. DISTRIBUTION/AVAILABILITY STATEMENT **Approved for public release; distribution unlimited**		
13. SUPPLEMENTARY NOTES		
14. ABSTRACT		
15. SUBJECT TERMS		

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**Same as Report (SAR)**	**22**	

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18

Since General Janvier was in Paris at the moment, Adm Leighton Smith contacted COMUNPROFOR, Lt Gen Rupert Smith, in Sarajevo as soon as he heard the news. The two commanders agreed that, while UN investigators worked to assign certain blame for the attack, Admiral Smith would begin preparing for bombing operations, if required. At 0200 on the 29th, General Smith called Admiral Smith to report that he was now certain that Bosnian Serb forces had fired the shell and that he consequently was "turning his key." The UN general, however, asked CINCAFSOUTH to delay launching attacks for 24 hours to give peacekeeping units in Bosnia time to pull into positions they could defend, should the Serbs launch retaliatory attacks against them. Also, it was necessary for General Janvier to return and approve the final list of targets for the initial strikes. After a number of conversations with Admiral Smith during the day, Janvier finally did approve 10 of 13 initial targets that had been proposed by Generals Ryan and Smith, and already tentatively approved by Admiral Smith.[62]

Meanwhile, General Ryan and his staff at the CAOC worked feverishly to ready the assigned NATO air forces for battle. In fact, Ryan had arrived in the CAOC on the morning of the 28th to exercise the VULCAN protection plan for Sarajevo. With an actual

crisis at hand, the general canceled VULCAN and focused his staff on activating and modifying, as necessary, the operational plans and unit reinforcements that comprised what amounted to the DELIBERATE FORCE plan. While waiting for orders to start operations and approval of the initial target list by General Janvier and Admiral Smith, the AIRSOUTH commander concentrated on alerting his units, refining the air tasking message that would guide their operations for the first day of bombing, and bringing additional air and support forces into the theater, as required. The delay on starting operations was useful here, in that it provided time to flow additional US Air Force, Navy, and Marine aircraft into Aviano and to swing the carrier *Theodore Roosevelt* into the Adriatic in time to launch aircraft on the first strikes. He also reaffirmed to his staff that he intended to ensure that the weapons and tactics utilized by NATO would be selected and flown to accomplish the required levels of destruction at minimum risk of unplanned or collateral damage to military and civilian people and property. Ryan and Admiral Smith were in full agreement that the diplomatic sensitivities of the campaign made collateral damage an issue of pivotal strategic importance. Ryan believed that a stray bomb that caused civilian casualties would take the interventionists off the moral high ground, marshal world opinion against the air campaign, and probably bring it to a halt before it had its intended effects.[63] Ryan's command was ready for operations by the end of the 29th. Then, after waiting out the 24-hour delay to allow UN peacekeepers time to hunker down in their defensive positions, the first NATO jets went "feet dry" over the Bosnian coast at 0140 on the 30th, laden with bombs to make the first strike. The strikes would continue, as the UN had just warned the Bosnian Serb army (BSA) commander, General Mladic, until "such time as . . . the threat of further attacks by the BSA has been eliminated."

The physical and temporal dimensions of the ensuing campaign were fairly compact, particularly when compared to the scale and scope of a major air campaign, such as Operation DESERT STORM during the 1990–91 Gulf War. Compared to the vast reaches of Southwest Asia, NATO air attacks in DELIBERATE FORCE occurred in a triangular area only about 150 nautical miles wide on its northern base and stretching about 150 miles again to the south. The weight of the NATO attack also was relatively limited. DESERT STORM lasted 43 days. But during the 22 calendar days of DELIBERATE FORCE, NATO aircraft and a single US Navy ship firing a volley of tactical land attack missiles (TLAM) actually released weapons against the Serbs on just 12 days. Two days into the campaign, at the request of General Janvier, NATO commanders halted offensive air operations against the Serbs for four days to encourage negotiations. When useful negotiations failed to materialize, they resumed bombing on the morning of 5 September and continued through the 13th. When notified by Gen Rupert Smith on 14 September that General Mladic and President Karadzic of the Serb Republic had accepted the UN's terms, CINCSOUTH and General Janvier jointly suspended offensive operations at 2200. They declared the campaign closed on 20 September.

The total air forces involved included about 220 fighter aircraft and 70 support aircraft from three US services, Great Britain, Italy, Germany, Holland, Greece, Turkey, Spain, and France—all directly assigned to AIRSOUTH and based mainly in Italy—and a steady stream of airlift aircraft bringing forward units and supplies. On days when strikes were flown, the AIRSOUTH-assigned forces launched an average of four or five air-to-ground "packages," involving perhaps 60 or 70 bomb-dropping sorties and another one hundred to 150 other sorties to provide combat air patrol, defense suppression, tanker, reconnaissance, and surveillance support to the "shooters." In total, DELIBERATE FORCE included 3,515 aircraft sorties, of which 2,470 went "feet dry" over the Balkans region to deliver 1,026 weapons against 48 targets, including 338 individual desired mean points of impact (DMPI).[64] These figures equated to just about a busy day's sortie count for coalition air forces during the Gulf War—and only a tiny fraction of the 227,340 weapons those air forces

released against the Iraqis in the 43 days of DESERT STORM.

For all of DELIBERATE FORCE's brevity, limited scale, and operational one-sidedness, the various researchers of the BACS all discovered that the execution phase of the operation offered many insights into the application and usefulness of airpower in a complex regional conflict. Summarized here are only those of their discoveries that seem to have the broadest importance to the general community of airpower thinkers. Some of these discoveries stem from the operational context of the conflict. Others stem from the continued, even increased, political and diplomatic complexity of DELIBERATE FORCE in its execution phase.

From the inception of its study, the BACS team anticipated that leadership would be a broadly interesting area of inquiry. Reports from the field and subsequent interviews high-lighted the exceptionally close control General Ryan exercised over DELIBERATE FORCE tactical events. Reflecting his and Admiral Smith's conviction that "every bomb was a political bomb," General Ryan personally over-saw the selection of every DMPI in every target. He also personally scrutinized every selection—or "weaponeering"—decision made for the actual weapons to be used against DMPIs, and he examined or directed many tactical decisions about such things as the strike launch times, the specific composition of attack formations, and the selection of bomb-run routes. In his words, Ryan felt obliged to exercise such close control to minimize the risk of error and, if mistakes were made, to ensure that they would be attributable to him—and him alone.[65] Ryan's approach to leadership, in other words, was consciously chosen and appropriate to the circumstances as he saw them.

To place General Ryan's acute attention to tactical details in a broader historical context, Maj Chris Orndorff pointed out that it had much in common with the great captaincy of field commanders in the period up to and including the Napoleonic era. Great captains and great captaincy, Orndorff explained, were epitomized by Napoléon and his art of command. He was the master practitioner of an art of command characterized by close attention to the logistical and tactical details of armies, as well as with their strategic guidance. Great captains practiced this broad range of intervention because it was vital to their success and because they had the means to do so. Because armies were small, individual tactical events assumed great importance, and contemporary communications allowed a single commander to monitor and control such details in a timely manner. But as the industrial revolution progressed through the nineteenth century, the size of armies and the scope of their operations vastly increased. Great captaincy, at least to the extent that it involved close oversight of logistical and tactical details, became impractical in wars between large industrial states. In response, the Prussians led the world in developing a military system based on centralized strategic com-mand, generalized planning by trained staff officers, and decentralized execution of operations and logistical support by standard-ized units in accordance with the guidance of the first two groups. Among the many features of this system was a division of labor that had senior commanders thinking strategically and eschewing close management of tactical details. These cultural arrangements, coupled with a sophisticated approach to military training and education, were, in the summation of one historian, an effort by the Prussians to institutionalize a system whereby ordinary men could replicate the military genius of a great captain, such as Napoléon, on a sustained basis and on an industrial scale.[66] Given that perspective, Orndorff suggested that General Ryan's close supervision of DELIBERATE FORCE's tactical details merits close examination of the conditions that made it apparently successful in an age when the staff system seems to have otherwise supplanted great captaincy in war.

In net, Major Orndorff's conclusions reflected the universal consensus among everyone interviewed for the study that General Ryan's exceptional involvement in the tactical details of DELIBERATE FORCE reflected both his prerogatives as the commander and an appropriate response to the political and

military circumstances of the operation. Such was the case, Orndorff believed, because the circumstances of DELIBERATE FORCE conformed in important ways to circumstances that gave rise to preindustrial command practices. Tactical events, namely the destruction of specific targets and the possibility of suffering NATO casualties, potentially carried profound strategic implications. The NATO air forces involved were small in relation to the capacities of the command, control, communications, and intelligence systems available to find targets, monitor and direct forces, and maintain command linkages. Drawing on the analogy of an earlier commander standing on a hill, Orndorff suggested that General Ryan had the sensory and cognitive capability to embrace the air battle comprehensively, assess the tactical and strategic flow of events, and direct all of his forces in a timely manner. In the words of one senior US Air Force leader, therefore, General Ryan not only could exercise close tactical control over his forces, but also was obliged to do so.[67]

Major Orndorff and other members of the team did identify some potential drawbacks of General Ryan's great captaincy. Most notably, it focused a tremendous amount of work on the general and a few members of his staff. Individuals working closely with Ryan in the CAOC, such as Col Daniel R. Zoerb, AIRSOUTH director of plans, Col Steven R. Teske, CAOC director of plans, and Col Douglas J. Richardson, CAOC director of operations, worked 18-hour days throughout the campaign.[68] After two weeks, they were, by their own accounts, very tired. At the same time, other members of the CAOC staff were underutilized, as some of their corporate tactical responsibilities were absorbed, at least in their culminating steps, by the small group of officers working around Ryan. Meanwhile, some of the higher responsibilities that might have fallen on Ryan, in his capacity as the senior operational commander, devolved on his chief of staff in Naples, Maj Gen Michael Short. Acting as the rear echelon commander of AIRSOUTH, General Short became responsible for, among many things, aspects of the public affairs, logistical, political, and military coordination functions of DELIBERATE FORCE. In retrospect, General Short believed that while this division of labor made good sense under the circumstances, he felt that he and General Ryan had not fully anticipated all of the staff and communications requirements needed to keep him up-to-date on operations and other issues. As a consequence, General Short sometimes found it difficult to prepare timely answers to higher-level inquiries about operations or General Ryan's plans.[69] Taken with the effect of General Ryan's centralized leadership style on the CAOC's division of labor, General Short's experience indicates a need for airmen to anticipate that leadership style is an important choice—one that can shape staff pro-cesses and morale significantly.

Maj Mark Conversino wrote the BACS chapter on DELIBERATE FORCE operations, with a primary focus on the activities of the 31st Fighter Wing at Aviano AB.[70] In net, his research revealed that the wing's great success in the campaign reflected the professionalism and skills of its personnel, ranging from its commander to individual junior technicians working on the flight line. From July 1995, the 31st Wing formed the core of the 7490th Wing (Provisional), an organization established to embrace the numerous USAF fighter and support squadrons and US Navy and Marine air units brought to Aviano for DENY FLIGHT. These units made Aviano a busy place. At its peak strength, the 7490th Wing included about one hundred aircraft, all crowded onto a base with only one runway and designed to handle normally a wing of about 75 fighters. The crowded conditions of the base made the choreography of maintaining, servicing, and moving aircraft about the field so tight and difficult that many of the people working there began calling it the "USS *Aviano*," in allusion to the conditions normally prevailing on the deck of an aircraft carrier. Moreover, the commander of the 7490th, Col Charles F. Wald, and his staff were responsible for tactical coordination with other NATO squadrons scattered around Italy. Time pressures and limited communications channels made this task daunting. Had the 31st Wing's permanently and tempo-

rarily assigned personnel not performed at such a high level across the board, DELIBERATE FORCE in reasonable probability would have fallen flat on its face.

At the same time, Major Conversino's chapter identifies several sources of psychological stress at Aviano that, over a more protracted campaign, might have undermined the provisional wing's high performance and morale. The presence of families was one potential source of stress. Aviano was the 31st Wing's permanent base. Consequently, the families of many of the wing's personnel lived in the vicinity. During DELIBERATE FORCE, these families could be both a source of emotional strength for the combat aircrew and a potential source of worry and distraction. On the one hand, spouses brought meals and moral support to the units. On the other hand, they and their children were *there,* complete with their school problems, broken cars, anxieties, and so forth. While, in general, morale stayed high at Aviano, it is important to realize that the campaign lasted only two weeks and that the wing took no casualties. Many of the individuals and some commanders interviewed by Conversino and other BACS members expressed concern at what would have happened to the emotional tenor of the base community and to the concentration of the combat aircrewmen, had the campaign gone on longer with casualties or with the materialization of terrorist threats against the families. During operations, one squadron commander even considered evacuating dependents if DELIBERATE FORCE dragged on.[71]

Another source of stress stemmed from the unfamiliar nature of the DELIBERATE FORCE mission. Actually, at the level of tactical operations, the operational tempo, tactics, and threats of the campaign were much like those that 31st Wing airmen would have expected to face in a high-intensity conflict. Daily flights as elements of "gorillas" of attack, defense suppression, electronic warfare, escort, and tanker aircraft—potentially in the face of radar-directed antiaircraft defenses—look pretty much the same tactically, regardless of the "limited" or "conventional" nature of a conflict at the operational and strategic level. But these conflicts do differ at the operational and strategic levels, and therein lay a source of confusion and tension between the field units and the CAOC. Airmen in the field found themselves fighting a tactically conventional campaign at potentially substantial risk from enemy action. The CAOC made plans and issued orders that reflected the operational- and strategic-level constraints and restraints inherent in the air campaign's identity as the military arm of a limited peace operation. The difference between these perspectives was manifested in the confusion and frustration felt by some interviewed airmen over such things as the rules of engagement, outside "interference" with their detailed tactical plans and decisions, apparent restrictions on the flow of intelligence information to the field, and so forth. Since these things came to the field via the CAOC, a number of the BACS interviewees expressed a sense that they were fighting one war and that the CAOC was fighting another one, with the CAOC's version of the war tending to put the flyers at greater and unnecessary risk.[72]

Major Conversino also identified several logistical problems that might have undermined the power of the air campaign, had it gone on longer. Under the US Air Force's "lean logistics" concept, air bases normally do not have large stocks of supplies and spare parts on hand. The concept assumes that modern logistics techniques can move supplies and parts from homeland depots quickly enough to meet demands and, thereby, reduce the size of the warehouse and maintenance operations a base has to maintain to sustain operations. At Aviano, one manifestation of lean logistics was that the base experienced shortages in several areas of supply as soon as operations began. One of the more critical shortages was in aircraft tow vehicles ("bobcats") and their tires. Compounding the problem, the "war" began on a Wednesday, meaning that stateside depots, which stayed on a peacetime schedule, were closed for the weekend, just as urgent requests for supplies began to flow in from Aviano. Quick calls to supervisors opened up the depots, but some supply problems, such as bobcat tires, were not solved during DELIBERATE FORCE operations.

Complementing Major Conversino's broad review of DELIBERATE FORCE operations, Lt Col Rick Sargent, in a massive chapter, shifted the focus of the BACS to a more microscopic assessment of the weapons, tactics, and targeting aspects of the air campaign.[73] After a detailed discussion of the types of manned and unmanned aircraft employed during the operation, Sargent described the precision-guided munitions (PGM) used and their fundamental importance to its conduct and outcome. Because NATO air commanders were concerned with getting the fastest possible results from their operations, while minimizing collateral damage and casualties, Sargent argued that "precision guided munitions became the overwhelming weapons of choice during air strike operations." Of the 1,026 bombs and missiles expended during DELIBERATE FORCE, 708 were PGMs. Most of Lieutenant Colonel Sargent's detailed discussion of specific weapons and employment tactics remains classified. In general, however, his work demonstrates that PGM employment has become a complex science. There are now numerous types of PGMs available, each with distinct characteristics of target acquisition, range, terminal effects, and cost. Tacticians and "weaponeers" must know and understand those characteristics to be able to make suitable decisions about their employment within the boundaries of time, targets, and ROE. The criticality of those decisions will only increase for many likely conflicts, for, as Sargent reports General Ryan as having said, "dumb bombs are dead." Unguided weapons likely will retain their utility in many circumstances, but in cases in which time and tolerance for unwanted effects are in short supply, they are becoming unnecessarily risky to use.

Sargent's research, as well as that of other members of the BACS team, also highlighted the need for air planners and weaponeers to recognize that PGMs not only differ in their technical characteristics and effects, but also may differ in their political and emotional effects. The case in point here was the employment of 13 TLAMs on 10 September. General Ryan requested, and Admiral Smith approved, the use of these long-range, ship-launched missiles mainly on the military grounds that they were the best weapons available to take out key Bosnian Serb air defense systems in the Banja Luka area, without risk to NATO aircrews. As it turned out, these missiles were more than just another weapon in the context of Bosnia. TLAMs represented the high end of PGM technology. Their sudden use in Bosnia signaled to many people that NATO was initiating a significant escalation of the conflict. That was not the intent of the military commanders, but the action was taken that way. Many members of the NAC were also upset by the fact that they had not been consulted on the use of these advanced weapons before they were fired.[74] At the same time, Admiral Smith reported that he subsequently learned from an American diplomat in contact with the Bosnian Serbs that the TLAMs "scared the [slang word for feces] out of the Serbs." It was, according to the admiral, more evidence to the Serbs that NATO's intent was serious and that they "did not have a clue where [they] could go next."[75] Clearly, the term *weaponeering* must carry a broad meaning for the senior commanders and the technicians involved in the process.

In a similar vein to Lieutenant Colonel Sargent's effort, Maj Mark McLaughlin examined the nature of NATO combat assessment during the air campaign. Beginning at the theoretical level, McLaughlin wrote that combat assessment is the process by which air commanders determine how they are doing in relation to attaining their objectives. Through a three-step process of battle damage assessment (BDA), munitions effectiveness assessment, and reattack recommendations, commanders learn if their attacks and the weapons with which they make them are bringing the enemy closer to defeat at the best possible rate. Effective combat assessment, therefore, is a vital tool for evaluating and refining tactics and operational concepts.

At the practical level, McLaughlin wrote that, while the CAOC's combat assessment process worked well, there were problems—particularly in the area of BDA. Notable even before DELIBERATE FORCE were the near absence of NATO BDA doctrine and the uneven experience and training levels of the

various national personnel doing BDA in the CAOC. The different NATO air forces had different standards and methods for assessing damage. For the sake of standardization, CAOC BDA managers attempted to train their subordinates in US doctrine and procedures. But that process was undermined by the rapid turnover of their staffs, engendered by the practice of manning the CAOC mainly with TDY personnel. The net effect of these problems, according to McLaughlin, was a somewhat sluggish pace in the flow and assessment of BDA data into, within, and out of the CAOC. In turn, the potentially negative effects of the slow pace of BDA, at least in terms of avoiding conflicting public assessments of how the bombing campaign was going, were minimized by the compactness of the air campaign and its target list, by General Ryan's decision to make all definitive BDA determinations himself, and by Admiral Smith's close hold on the outflow of combat assessment information to the press and even to NATO member governments. Whether or not the flow of the combat assessment process was painfully slow, neither commander intended to or had to make judgments under the pressure of public scrutiny and perhaps countervailing analysis.

In the shortest chapter of the BACS, Major McLaughlin also offered a succinct assessment of the effectiveness of DELIBERATE FORCE. Recognizing that the perspectives of Bosnian Serb leaders had to be the foundation for assessing the campaign, McLaughlin proposed that its effectiveness "should be judged for [its] direct impact . . . in light of the concurrent victories by Croatian and Muslim (Federation) ground forces, American-sponsored diplomatic initiatives, and Serbia's political pressure on its Bosnian Serb cousins." Following this prescription, McLaughlin illustrated the effects of the bombing on the psyche and calculations of the Serb leaders through the accounts of the various diplomats who dealt with them. As the campaign proceeded through active bombing, pause, and more bombing, McLaughlin traced a steady deterioration in the will of President Milosevic, President Karadzic, and General Mladic to resist NATO and UN demands. Croatian and Muslim (Federation) ground offensives going on at the same time served to increase the pressure on Serb leaders. In rapid shuttle diplomacy, Ambassador Holbrooke exploited these pressures to coax and bully the Serbs into making concessions. A major barrier to progress went down on 8 September, when regional leaders met with Holbrooke at Geneva and agreed that the future Federation of Bosnia would include a Bosnian Federation of Croats and Muslims and a separate and coequal Serb Republic. The agreement also allowed the two entities to "establish parallel special relations with neighboring countries," and it recognized that the Federation and the Serb Republic would control 51 percent and 49 percent of Bosnia's territory, respectively—a division of land long established in the so-called Contact Group's proposals.[76] Thus, the Bosnian Serbs had in hand what they most wanted—autonomy. Under continuing pressure from ground and air attacks, they found it easier to accept UN demands, and on 14 September Holbrooke and Milosevic successfully pressured Karadzic and Mladic to end their active military pressure on Sarajevo.

DELIBERATE FORCE was about diplomacy—getting the Bosnian Serbs to end their sieges on the safe areas and to enter into productive negotiations for peace. Consequently, several BACS researchers, Major McLaughlin particularly, examined the interconnections between DELIBERATE FORCE and the ongoing diplomatic process.[77] What they found, in general, was that these interconnections were difficult to "package" and describe in a manner that was distinct and separate from other events and forces influencing the course of diplomacy. Despite its brevity and limited military scope, DELIBERATE FORCE turned out to be a complex diplomatic event, one influenced by military operations other than the air campaign—and by the conduct of diplomatic activities in several venues. A useful and defensible description of the relationship between airpower and diplomacy in this case, therefore, requires a clear understanding of these other operations and activities.

One of the more immediate effects of the bombing campaign was that it underscored and, to some degree, mandated a temporary shift of the intervention's diplomatic lead from the UN to the Contact Group. Formed in the summer of 1994, the Contact Group represented the foreign ministries of the United States, Great Britain, France, Germany, and Russia. The group's sole purpose was to provide an alternative mechanism to the UN for negotiating a peace settlement in the region. Since it had none of the UN's humanitarian and peacekeeping responsibilities to divert its attention or weaken its freedom to negotiate forcefully, the group's relationship with the Bosnian Serbs was more overtly confrontational than the UN's. This suited the US representative to the group, Ambassador Holbrooke, just fine. As the assistant secretary of state for European and Canadian affairs, he had been involved closely with Balkans diplomacy for some time, and he was an outspoken proponent of aggressive action against the Serbs.[78] Upon hearing of the Mrkale shelling, for example, he suggested publicly that the proper response might be a bombing campaign against the Serbs of up to six months.[79] Holbrooke's opinion was important because by the summer of 1995, he was the de facto lead agent of the Contact Group, and it was his small team of American diplomats and military officers that conducted face-to-face shuttle negotiations with the Serbs and other belligerent leaders during the bombing campaign. These shuttle negotiations took the Holbrooke team to Yugoslavia at the start of the bombing, to Brussels and the NAC during the pause, to Geneva for a major face-to-face meeting of the factional leaders on 8 September, to the United States, back to Belgrade on the 13th and to a host of other points in between.

The irony of Holbrooke's call for robust bombing was that the UN and NATO could not and did not initiate DELIBERATE FORCE to influence the peace process. Officially and publicly, NATO initiated the campaign to protect the safe areas. But as Ambassador Hunter pointed out, it would have been naive to think that the air attacks would not undermine the Serbs' military power and coerce them diplomatically. Nevertheless, Hunter believed that the bombing had to be "represented" merely as an effort to protect the safe areas. The consensus within the NAC for air action rested solely on support for the UN Security Council resolutions. There was no overt general commitment to bomb the Bosnian Serbs into talking.[80]

Also during the time of DELIBERATE FORCE, the intervention was conducting two military operations of consequence to the course of diplomacy. UN peacekeeping forces remained in the region though their role was mainly passive during the period of offensive air operations. In the weeks prior to the start of bombing, the UN had quietly drawn its scattered peacekeeping units in from the field and concentrated them in more defensible positions. This process rushed to conclusion in the final hours before bombing actually began. During the bombing, these forces mainly held their positions or conducted limited patrol operations, but they did not go on the offensive. At the same time, elements of NATO's Rapid Reaction Force (RRF) took an active, though limited, role in the intervention's offensive. The RRF deployed into the Sarajevo area, beginning in mid-June. During the first two days of DELIBERATE FORCE, its artillery units shelled Bosnian Serb military forces in the Sarajevo area. These bombardments certainly had some effect on Serb military capabilities, and they probably had some effect on their diplomatic calculations. However, given the lack of emphasis placed on them by the diplomats interviewed by the BACS teams, the effects of these activities on diplomatic events probably were limited, at least in relation to the effects of the air campaign and of the military operations of regional anti-Serb forces. At the same time, the passive value of the peacekeeping forces as a brake on the ability of the Serbs to more or less walk into the remaining safe areas and take them, or to take intervention peacekeepers hostage, certainly must have been a factor in military calculations—though one not explored in depth by the BACS.

All diplomats and senior military commanders interviewed by the BACS attributed

great military and diplomatic importance to Croatian and Bosnian offensive operations against local Serb forces, which had begun before DELIBERATE FORCE and which continued in parallel to it and afterwards. These offensives began in the spring of 1995, and they marked the end of the overwhelming military advantages of Serbian forces. In May the Croatian army began a successful offensive to reestablish government control of western Slavonia. Then, in late July, the Croatian army launched a major offensive—Operation STORM—to retake the *krajina* and to relieve the Serbian siege of the so-called Bihac Pocket—a small area under Bosnian control. In a few days, a Croatian force of nearly one hundred thousand well-equipped troops penetrated the *krajina* at dozens of places and captured Knin—a vital center of Croatian Serb power. Over the next several weeks, the Croatians systematically cleared the *krajina* of Serb resistance, moving generally from west to east.[81] At the same time, forces of the Bosnian Federation launched a series of operations against the Bosnian Serbs. Under pressure from the United States and other intervening governments, the Bosnian Croat and Muslim factions had reestablished the Federation in March 1994 and, since that time, had worked to improve the combat capabilities of its army. By the summer of 1995, the Bosnian army was ready to go on the offensive, and—as the Croats swept around the northern borders of Serb-held Bosnia—it struck west and north to push the Serbs back from the center of the country. Caught between a hammer and an anvil, the Serbs retreated precipitously, and by mid-September the Croatian government controlled its territory—and the proportion of Bosnia under Serb control had shrunk from 70 percent to about 51 percent.

The existence of a powerful ground offensive in parallel to DELIBERATE FORCE complicates any determination of the air campaign's distinct influence on diplomacy. Undoubtedly, the Croat-Bosnian offensives drastically altered the military prospects not only of the Serb factions in the two countries but also those of the Serbian leaders of the former Yugoslavia. Even before the Croatians launched their *krajina* offensive, Slobodan Milosevic offered to act as a peace broker between the Bosnian Serbs and the intervention. At the time, some observers attributed Milosevic's move to his concerns over the growing strength of non-Serb military forces and over the worsening economic condition of his country, brought on by UN sanctions.[82] In this light, one regional specialist, Norman Cigar, argues that the Serbian military reverses on the ground were more important than the air operations of DELIBERATE FORCE in getting them to accept UN demands. Ground operations, Cigar argues, confirmed for the Serbs that they were losing control of the military situation and, thus, had a profound impact on their diplomatic calculations. In his view, the air campaign had minimal direct effect on the Serbs' military capabilities and, consequently, had little impact on their diplomacy.[83]

Senior diplomatic and military leaders interviewed by the BACS—and some analysts—generally saw a more synergistic relationship between air, ground, and diplomatic operations in terms of their effects on the calculations of the Serbs. Though most people emphasized that the simultaneity of the two campaigns was unplanned, they also recognized that their conjunction was important to the ultimate outcome of negotiations.[84] Just as the Bosnian Serbs were facing their greatest military challenge on the ground, the air campaign drastically undermined their ability to command, supply, and move their forces. The combination of effects placed them in a much more immediate danger of military collapse than would have the land or air offensives separately. Also, the Bosnian Federation offensive established a division of territory between it and the Serb faction that almost exactly equalled the 51/49 percent split called for in intervention peace plans and reconfirmed at the Geneva peace talks on 8 September 1995. Ambassador Holbrooke maintained that this event greatly eased the subsequent peace negotiations at Dayton, Ohio, since it placed the Serbs in the position of merely acknowledging an existing division of territory,

rather than in a position of giving up hard-won territory that they previously had refused to relinquish.[85]

Moreover, every diplomat and senior commander interviewed believed that the air campaign distinctly affected the moral resistance of the Serb leaders and, consequently, the pace of negotiations. Prior to the bombing, Ambassador Christopher Hill observed that President Milosevic "always had a rather cocky view of the negotiations, sort of like he's doing us a favor," but after the bombing began, "we found him . . . totally engaged . . . [with an] attitude of let's talk seriously."[86] Not surprisingly, Holbrooke and Ambassador Hunter perceived that Serb diplomats relaxed somewhat when the bombing pause began on 1 September. When the bombing restarted on 5 September, Holbrooke perceived that Serbian diplomatic resistance weakened rapidly, to the verge of collapse.[87] This effect was clear at the meeting between Holbrooke's negotiating team and the Serbs on 13–14 September. At the meeting, Holbrooke found Mladic "in a rush" to end the bombing[88]—so much so that the meeting had hardly begun when Milosevic produced President Karadzic and his military commander, General Mladic, to participate directly in the talks. Mladic, who had the figurative noose of an indicted war criminal around his neck, arrived at the meeting looking "like he'd been through a bombing campaign."[89] After six hours of negotiations, the Serbs unilaterally signed an agreement to cease their attacks on and remove their heavy weapons from Sarajevo, without a quid pro quo from Holbrooke or the UN of stopping the bombing. Ambassador Hill attributed this capitulation to the threat of further bombing.[90] Interestingly, as he left the meeting, Karadzic plaintively asked Holbrooke, "We are ready for peace. Why did you bomb us?"[91]

NATO diplomats on the North Atlantic Council also recognized the importance and value of the bombing campaign. Their collective decision to authorize air operations in the first place was clear evidence of their expectation that the potential benefits of the operations outweighed their risks. Ambassador Hunter learned the depth of his compatriot's commitment to the bombing operations at the very beginning of the bombing pause. On the same afternoon that the pause began, Secretary-General Claes called a meeting of the NAC to confirm that the members remained willing to let operations resume when the commanders deemed necessary. For his part, Hunter anticipated some resistance to allowing the campaign to restart. To his surprise, all members favored resuming the bombing if the Serbs failed to show evidence of complying with UN demands. Having gotten over the question of restarting the campaign with unexpected ease, Hunter recalled that the real debate—one that consumed "about an hour-and-a-half" of the Council's time—was over whether to give the Serbs 48 hours or 72 hours to comply.[92] Having taken the international and domestic political risks of initiating DELIBERATE FORCE, the members of the NAC were determined to see it through.

Ambassadors Holbrooke and Hunter offered two distinct but interrelated explanations for the profound and immediate influence of the bombing on Serbian diplomatic resistance. Ambassador Holbrooke's explanation was to the point. Serb leaders, he felt, were "thugs and murderers" who consequently responded well to force.[93] Ambassador Hunter painted a more calculating picture of the Serbian leaders. In his view, they understood in the late summer of 1995 that their sole remaining diplomatic advantage in the Bosnian conflict lay in their ability to manipulate the internal divisions within and among the NATO and UN member states. The Serbs knew, Hunter believed, that neither organization could take decisive action against them unless consensus existed in the NAC and at least in the UN Security Council. For that reason, they should have taken the NAC's endorsement of the London agreement and the UN secretary-general's transfer of the airstrike "keys" to his military commander as disturbing omens. Based on past experience, however, the Serbs also had reason to hope that neither organization was really serious and would back off after a few halfhearted air strikes. The bombing pause probably rekin-

dled that hope. The NAC debate of 2 September, which Hunter believed the Serbs were privy to, and the resumption of the bombing itself shattered that hope.[94] The action was hard evidence that the UN's and the NAC's expressions of unanimity and commitment were real. Thus, even more than the ongoing advances of the Bosnian Federation forces and the initial start of the bombing, the knowledgeable participants interviewed by the BACS team all agreed that resumption of the bombing became the pivotal moment of the campaign. In Ambassador Hill's estimate, the bombing "was really the signal the Bosnian Serbs needed to get to understand that they had to reach a peace agreement."[95] Hunter believed that the decision and the act of resuming the attack clearly signaled to the Serbs that the UN and NATO were committed to winning a decision and that their opportunities for military success and diplomatic maneuver were running out.

An interesting feature of DELIBERATE FORCE, given the close connection between air operations and diplomacy, was that the direct operational commander, General Ryan, and the principal negotiator, Ambassador Holbrooke, never spoke to one another during the operation. Holbrooke spoke frequently during the campaign with UN commanders and on several occasions with Admiral Smith and General Joulwan, SACEUR. He even conferred with the NAC during the bombing pause. But he never spoke with the individual making the immediate decisions about the sequence, pace, weapons, and other tactical characteristics of the air attacks. Thus, for his part, General Ryan never spoke to the individual who most directly exploited the diplomatic effects of his operations. What they knew of one another's perceptions, priorities, and intentions was derived indirectly from information flowing up and down their respective chains of command.

From a legalistic perspective, the lack of contact between Holbrooke and Ryan was proper and politically necessary. First, as a US State Department representative and the leader of the Contact Group, Holbrooke had no formal place in either the UN or the NATO chains of command. Properly, any contact between him and Ryan should have moved up through State Department channels over to the secretary of defense or to the NAC and then down through those chains of command to Ryan, who acted both as the commander of the USAF Sixteenth Air Force and as a NATO air commander. Given the circumstances, the NATO chain of command was really the operative one. Second, any direct contact with the air commander possibly would have established the perception that the bombing was supporting Holbrooke's diplomacy—something that neither the UN nor NATO wanted to happen. Ambassador Hunter suggested that members of the NAC wouldn't have wanted any direct contact between Ryan and Holbrooke, "other than to keep one another vaguely informed, that is to exchange information." All political decisions related to the air campaign, he said, had to be made at the NAC. Hunter believed that any "tactical" cooperation between the general and the diplomat would have been a "very big mistake"; had Ryan adjusted his operations in response to information passed to him by "any negotiator," the NAC would have "had his head"—especially if something went wrong.[96] As a consequence, during DELIBERATE FORCE, Admiral Smith wanted no direct contact between his air commander and Holbrooke. The admiral avoided operational or targeting discussions with Holbrooke or his military deputy, US Army lieutenant general Wes Clark, because he "did not want either of them to even think they had an avenue by which they could influence [him]."[97] Fully aware of his exclusion from the NATO and UN command channels, Ambassador Holbrooke never based his pre–DELIBERATE FORCE negotiating plans on a bombing campaign, even though he believed that it would greatly facilitate a successful outcome.[98]

Unavoidable as it was under the circumstances, the lack of contact between Holbrooke and Ryan appears to have allowed disconnects in their understandings of key issues. Those disconnects, in turn, appear to have influenced the way the two individuals pursued their missions. For example, General Ryan's concern over collateral damage at least probably exceeded that

of the US diplomats involved. While the general was concerned that a significant collateral-damage event, particularly one causing the deaths of civilians, might rob the air campaign of its political support before it had decisive effect, the US diplomats involved generally believed that the air campaign had enough political support perhaps even to carry it through a serious incident of collateral damage.[99] In regards to the climate of opinion in the NAC, Ambassador Hunter pointed out that too much domestic political capital had been invested by the member states to start bombing operations for them to be brought to a halt by the unintended death of civilians and soldiers.[100] No one was advocating casual slaughter, but the net focus of the intervention's diplomatic community was on getting results from what may have been NATO's last bolt in Bosnia, rather than on preventing or reacting to incidents of collateral damage.

Whether closing this disconnect between NATO air leaders—mainly Ryan and Admiral Smith—and their diplomatic counterparts—mainly Holbrooke and Hunter—would have changed the flow of events is, of course, speculative. Even had they known that the diplomats were not poised to end the air campaign at the first incident of significant collateral damage (whatever "significant" meant in this case), Smith and Ryan certainly would not have reduced their efforts to minimize collateral damage and casualties from the bombing. For military, legal, and moral reasons, neither leader had any intention of doing any more harm to the Bosnian Serbs than was required by their mission to protect the safe areas. Likely, Admiral Smith would have still expected Ryan to worry about every DMPI, weapon, and other decision relevant to getting maximum effect at minimum collateral cost. But knowing that the diplomats were not as sensitive to collateral damage as they thought, might have given the military commanders a sense that they had more time to conduct their operations. That, in turn, might have let them slow down the pace of the bombing—something that might have been desirable, even if just to reduce the wear and tear imposed by the actual pace of operations on everyone, from General Ryan to the personnel in the flying units in the field. Indeed, at one point during the bombing, some CAOC staffers briefly discussed slowing down the pace of the campaign in the interest of safety. People, including the aircrews, were beginning to show signs of fatigue. But they rejected the idea in short order, believing that the diplomatic vulnerability of the operation required maximum effort to ensure that it had a decisive effect before it was shut down for political reasons.[101]

There was also a disconnect between Ryan's and Holbrooke's understandings of the dynamics of the bombing campaign and its possible duration. With his jets focusing their attacks almost exclusively on the targets covered in options one and two of OPLAN 40101, around 10 September General Ryan passed up word to his commanders that he would run out of such approved targets in a couple of days at the present pace of operations. For their part, Ryan and his planners did not necessarily equate running out of currently approved targets as meaning that the campaign had to end automatically. There were several targeting options available that could have permitted a continuation of the bombing. These included (1) hitting or rehitting undestroyed DMPIs among the targets already approved, (2) adding and/or approving new option-one-and-two targets to the list, or (3) hitting option-three targets. In fact, AIRSOUTH planners were already looking at new option-one-and-two targets, and General Joulwan had already raised the option-three issue with the NAC, with a negative response.[102] Nevertheless, in the second week of September, AFSOUTH had several options for usefully extending the air campaign, should that be politically or militarily required. However, that was not the information that got to Ambassador Holbrooke and his boss, Secretary of State Warren Christopher. Based on his conversations with Admiral Smith and a report to the National Security Council on 11 September by the vice-chairman of the Joint Chiefs of Staff, Adm William Owens, Ambassador Holbrooke recalls that he and the secretary understood unequivocally that running out the existing target list meant the end of bombing operations. Because that news had such drastic implications for his

negotiations, Holbrooke relates, he immediately asked Admiral Owens to see if there was some way to extend the campaign.[103] Interestingly, General Ryan later could not recall ever hearing about the ambassador's interest in stretching things out.[104]

Whatever the causes of the informational disconnect between Ryan and Holbrooke, it had an immediate effect on American and, it follows, Contact Group diplomacy. After the NSC meeting, Holbrooke relates, Secretary Christopher directed him to return immediately to Belgrade to resume negotiations with President Milosevic. The two statesmen had been planning to wait a week longer before reengaging the Serbians, in the hope that the continued bombing would further soften their obstinate resistance to meeting both the UN's and the Contact Group's demands. In other words, Holbrooke was determined to get the Serbs to halt their attacks on the safe areas *and* to begin making the territorial concessions necessary to give reality to the just completed Geneva Agreement. But with the end of offensive air operations apparently imminent, Christopher adjusted his diplomatic plan, and Holbrooke left for Serbia immediately, to get what he could from the Serbs before the bombing ended.[105] Fortunately, although it was already becoming public knowledge that NATO was running out of option-two targets and was unlikely to shift to option three, the Serbs were beaten and ready to accept the UN's demands at least.[106] Consequently, Holbrooke got little for the Contact Group other than promises to participate in some sort of peace conference, but he did get the Serbs' commitment to lift the sieges and pull their heavy weapons out of the Sarajevo exclusion zone. Attributing his partial success to the need to get a settlement before the Serbs realized the impending halt to the bombing, Holbrooke later related that "I would have been . . . willing to continue the negotiations, if Smith or Joulwan had said, 'Boy we have a lot of great targets left out there.' "[107]

Again, arguing that closing the disconnect between Ryan and Holbrooke on this issue might have reshaped the air campaign remains a matter of speculation, even if it had been possible to do so. After all, Ryan was still functioning as a NATO commander, and Holbrooke was not in his chain of command; further, for reasons of political sensitivity, he was not even free to discuss operations openly with the air commander. However, in actual practice, the operational and political boundaries between the UN and NAC, on the one hand, and the United States and the Contact Group, on the other, were not as sharp as the formal diplomatic arrangements suggested. To be sure, the bombing was under way to secure the safe areas and protect peacekeepers, but most leaders involved understood that those objectives were not likely to be obtained unless the Serbs were humbled militarily and at least agreed to serious negotiations over the political and territorial proposals of the Contact Group. Similarly, while the UN officially had the political lead in terms of sanctioning and benefiting from the bombing, it was Ambassador Holbrooke who exercised the practical diplomatic lead during DELIBERATE FORCE. It was he, in fact, who extracted the concessions from the Serbian leaders on 14 September that allowed the UN and NATO to announce success and "turn off" their keys. He was, therefore, acting as a de facto diplomat for the other international organizations, even if none could say so. Thus, while the political-military arrangements existing around DELIBERATE FORCE made good *formal* sense at the time, their artificiality, in terms of what was going on operationally, clearly influenced the course of diplomacy and air operations in ways that arguably were undesirable. In point of fact, the indirectness of the flow of information between Ryan and Holbrooke created a situation, in effect, in which the commanders pressed their operations to get their full diplomatic effect before the *diplomats* arbitrarily cut off the bombing. This occurred even as the diplomats scrambled to get what diplomatic effect they could before the *commanders* arbitrarily cut off the bombing. The irony of the situation is notable.

Even after it ended, DELIBERATE FORCE—or at least its memory—remained an active factor in the shape and pace of subsequent negotiations for Bosnian peace. Formal talks were taken up in November at Wright-Patterson Air Force Base, near Dayton, Ohio. Holbrooke

considered it a fortuitous choice of venue. Arriving Serb diplomats walked from their airplanes past operational combat aircraft parked on the ramp nearby. Hill arranged to hold the welcoming banquet on the floor of the United States Air Force Museum, where the Serbs literally sat surrounded by "an awesome display of airpower," including some of the very aircraft and weapons recently used against them.[108] According to their American escort officer, the Serbs remained tight-lipped about their impressions of the event.[109] But there is no doubt of the importance that the key interventionist diplomats attached to keeping airpower before the Serbian diplomats.

Implications

During the course of their research, the BACS team members observed and described a number of things about DELIBERATE FORCE that carry important implications for the planners of future air campaigns. Once again, this article only summarizes those implications that some—though not necessarily all—of the team members felt had value beyond the specific circumstances of DELIBERATE FORCE. For all its uniqueness, DELIBERATE FORCE offers broadly useful implications because one can describe its key characteristics with some precision. For the NATO airmen involved, it was a strategically limited, tactically intense, high-technology, coalition air campaign, conducted under tight restraints of time and permissible collateral damage; further, it was aimed at coercing political and military compliance from a regional opponent who had no airpower. To the extent that military planners will plan future air campaigns in the context of some or all of these characteristics, they should first understand what the DELIBERATE FORCE experience suggests theoretically about how things might work under similar circumstances.

As a first observation, *the determined and robust character of DELIBERATE FORCE was essential to its near-term success.* The campaign's objectives were limited, but to achieve them, NATO airmen had to be free to make their plans and execute their operations within the full limits of appropriate boundaries of political objectives and the laws of war—all of which should have been, and generally were, encapsulated in the rules of engagement. A halfhearted, overly restrained, or incomplete air campaign likely would have been disastrous to NATO and UN credibility—and it certainly would have prolonged the war. As RAND researcher Steven Hosmer recently concluded, a weak air campaign probably would have "adversely conditioned" the Bosnian Serbs and other factions to believe that both bombing and the interventionists were indecisive and, therefore, that they should fight on. "To reap the psychological benefits of airpower," Hosmer wrote, "it is also important to avoid adverse conditioning. The enemy must not see your air attacks as weak or impotent. The hesitant . . . bombing campaign against North Vietnam in 1965 is a prime example of adverse conditioning. The hesitant use of NATO airpower in the former Yugoslavia prior to mid-1995 is another example of adverse conditioning."[110] In parallel, Ambassador Holbrooke felt that the actual targets struck during DELIBERATE FORCE were less important to its effect on Bosnian Serb leaders than the fact that the NATO campaign was sustained, effective, and selective.[111]

As a second observation, *precision-guided munitions made DELIBERATE FORCE possible.* Given the campaign's restraints of time, forces available, and its political sensitivities, NATO could not have undertaken it without a relatively abundant supply of PGMs and air platforms to deliver them. Precision weapons gave NATO airmen the ability to conceive and execute a major air campaign that was quick, potent, and unlikely to kill people or destroy property to an extent that would cause world opinion to rise against and terminate the operation. The BACS team found no substantiated estimates of the number of people killed by DELIBERATE FORCE.[112] The simple fact that Bosnian Serb leaders made no effort to exploit collateral damage politically indicates that they had little to exploit. Had NATO and UN leaders ex-

pected enough collateral damage to give the Serbs a political lever, they probably would not have approved initiation of DELIBERATE FORCE, or if such damage had begun, they probably could not have sustained the operation politically for long. Indeed, as Ambassador Hunter recalled, trust in the implied promise of NATO airmen to execute their air campaign quickly and with minimal collateral damage permitted the members of the NAC to approve its initiation in the first place.[113] Had those diplomats doubted that promise, DELIBERATE FORCE never would have happened, and had NATO airmen failed to deliver on either part of their promise, the campaign almost certainly would have come to a quick end.

The third observation follows from the first two: *NATO's primary reliance on air-delivered precision weapons during DELIBERATE FORCE shielded the international intervention in Bosnia from "mission creep."* Had NATO chosen to conduct a joint air and ground offensive against the Serbs or to rely on nonprecision aerial weapons in the bombing campaign, DELIBERATE FORCE certainly would have involved greater casualties on both sides. Instead of a series of just over a thousand carefully placed explosions and a few seconds of aircraft cannon fire, DELIBERATE FORCE likely would have involved protracted operations by tens of thousands of troops, systematic air and artillery barrages in support of their advance across the land, and thousands more explosions of not so precisely placed bombs and artillery shells. Put another way, in any form but an independent air campaign, DELIBERATE FORCE would have given the Serb faction a vastly greater opportunity to fight back and inflict casualties on NATO and UN forces. Reasonably, the Serbs would have fought back, at least long enough to see if killing some number of interventionist troops would break the will of their political leaders. The problem with such casualties, however, is that they could have reshaped the political, normative, and emotional nature of the operation. Televised reports of rows of dead Bosnian Serb soldiers, shelled towns, lines of refugees, and NATO body bags likely would have reshaped every participant's view of the conflict, and there would have been more time for those changed views to have political effect. Of course, there is no way to tell if a protracted air-land campaign or nonprecision bombing campaign would have changed what was NATO's "disciplinary" peace-enforcement mission into "real war" missions of retreat, conquest, or retribution. The very uncertainty of the direction in which the interventionist mission would have crept underscores the value of airpower's characteristics of precision, control, and security in this particular peace operation.

The fourth observation is that *contacts between military leaders and some key diplomats do not seem to have kept up with the pace of events just before and during DELIBERATE FORCE*. Because of limitations of the interview information the BACS team collected, the width of the gap in the diplomatic and military discourse is not clear, but it is clear from the evidence collected that the gap existed and that it shaped political and military events to some degree. Perhaps most significantly, Ambassador Holbrooke and General Ryan made plans and took actions in ignorance of one another's positions in key areas such as collateral damage and extending the air campaign. Reflecting on the possible diplomatic consequences of the disconnect between him and Ryan over the practicality of the campaign, Holbrooke wrote, "I regret greatly that . . . I did not have direct contact with Ryan; it might have allowed us to follow a different, and perhaps tougher, strategy."[114] Moreover, while the bureaucratic distance between these individuals may have been understandable under the circumstances of this operation, it may not have needed to extend to an absolute proscription of contact between them. Speaking from his perspective as a member of the NAC, Ambassador Hunter, for one, indicated that a passage of factual information between the commander and the diplomat probably should have happened. At the same time, it is clear from the context of Hunter's statement that he still thought that no contact between Ryan and Holbrooke could have been allowed

to give the impression that they were actually coordinating their efforts.[115]

In contrast to the reflections of the diplomats, Admiral Smith and General Ryan remained convinced, nearly two years after the fact, that any direct contact between Holbrooke and AIRSOUTH would have been improper and too risky diplomatically to be worth trying. Both commanders believed that such contact would have violated the established military chain of command and the proper interface between the diplomatic and military leadership. In Admiral Smith's view, had he allowed Holbrooke and Ryan to talk, he would have placed the whole operation at risk diplomatically, and he also would have undermined his boss, General Joulwan.[116] In separate comments, General Ryan echoed that position, maintaining that to "even hint" at direct coordination between him and Holbrooke was "ludicrous." Since part of Holbrooke's sanction to negotiate in the Balkans came from the UN, and since NATO was likewise operating at the behest of the UN, Ryan argued that the proper level of coordination between the diplomat and soldier should have and could only have occurred at the "strategic level." Thus, Ryan suggested that the real area of inquiry in this issue may lie in the possible inadequacy of the information flow between the NAC and UN leaders.[117]

The operative point remains, however, that Ryan's and Holbrooke's activities were intertwined during the bombing, regardless of the bureaucratic and diplomatic arrangements and fictions maintained, and that those arrangements did not adequately support their requirements for information. The implication of this for the future architects of politically charged, fast-paced military interventions is that they must pay close attention to keeping the formal and informal communications channels and boundaries between soldiers and diplomats current, coordinated, and flexible. It also will be important to make sure that the right soldiers and diplomats are talking to each other at the right time, within limits and on topics appropriate to the circumstances. This may mean that they remain linked cleanly and traditionally at the tops of their respective chains of command. But it also may be that in the close-coupled political-military environments of future peace operations, for example, some linkages at subordinate levels will be appropriate. This observation certainly does not justify diplomats mucking about with tactics or soldiers hijacking diplomacy. Nor does it bow to generalized beliefs that diplomats and soldiers operate in separate realms. The reality is that war is about diplomacy and that diplomacy's final sanction is war. Diplomats and soldiers will always be in each other's "mess kits." The real issue is how both groups can anticipate and educate themselves and one another on the appropriate boundaries and rules of their relationship under given circumstances. The political-military experience of DELIBERATE FORCE should prove to be an interesting case study in that educational process.

Fifth, and in a similar vein, *while the focus and style of Lieutenant General Ryan's leadership was mandated by and appropriate to the immediate task of keeping the air campaign politically viable, they also created stresses within AIRSOUTH staff elements that may have become problems had the campaign continued much longer*. Given the necessity of ensuring that the targets, weapons, and tactics of every attack sortie were selected and controlled to minimize the possibility of collateral damage, General Ryan's decision to centralize such decisions to himself made sense. But making all those decisions day-to-day locked the general into 18-hour workdays with minimal time and energy to consider the other responsibilities that fall to a senior component commander. Part of this load was picked up by Major General Short, Ryan's chief of staff, who stayed in Naples to oversee AIRSOUTH's administrative, logistics, personnel, and public relations tasks and to maintain day-to-day liaison with Admiral Smith. Short was up to the task, but he did comment to the team that at times he lacked the continual contact with the CAOC that he needed to fulfill his liaison and press responsibilities in a timely manner. From the CAOC itself, several staffers commented that Ryan's centralization of technical decisions of targeting and weaponeering

created a division within the CAOC staff. On one side of this division, they felt, was a small group of a half-dozen officers who also worked unsustainably long days to help the general make his tactical decisions. On the other side was the bulk of the several-hundred-strong CAOC staff who did little more than gather and distribute data and who tended to feel underutilized in comparison to General Ryan's arguably overworked inner core. Obviously, one can make too much of this issue, particularly since the BACS was not chartered and equipped to collect the comprehensive sociological and organizational data necessary to credibly describe the real effects of Ryan's or anyone else's leadership. But the patchy evidence collected by the team does suggest that future air commanders and their subordinates should be aware that the stylistic—as well as the substantive—elements of leadership will have far-reaching effects on the work, morale, and endurance of their staffs. Further, it suggests a potentially valuable line of inquiry for future research.

Sixth, *despite the relative smallness of their force structure, NATO commanders chose to conduct their operations for operational- and strategic*-level effects, rather than tactical ones. In US force-planning terms, AFSOUTH conducted DELIBERATE FORCE with about a two-fighter-wing-equivalent combat force and an appropriate support slice of reconnaissance, surveillance, electronic warfare, SEAD, lift, and other aircraft. AIRSOUTH commanders had the option of conducting their attacks for primarily tactical effects, by concentrating on the Serbian materiel targets encompassed in option one. Instead, they elected to focus their attacks on option-two targets to achieve broader and quicker operational and strategic results, namely by destroying the mobility and command infrastructure of the BSA and thereby coercing its leaders to accede to UN demands. In other words, the NATO air force was not the giant fielded for DESERT STORM, but it still had a strategic option. This is an important point for US air planners pondering the problems of conducting air war in secondary theaters, where they perhaps will be allocated relatively small forces to accomplish big jobs in a hurry. It is also important for the planners and commanders of smaller air forces. The possession of a strategic or lead-force option is less dependent on the size of an air force than on the military-political circumstances, doctrine, materiel, and available targeting options. It follows then that the leaders and budget masters of air forces of even moderate size should not reject the strategic- and operational-level options of air warfare out of hand. If their anticipated employment opportunities suggest the utility of strategic attack, broad-ranging interdiction operations, or other asymmetric ways of bringing airpower to bear against their enemies, then they should step up to making the appropriate investments in air vehicles, munitions, support infrastructure, command and control systems, and so forth.

Seventh, and at a more tactical level, *for NATO airmen, the operational features of this limited conflict differed little from those of major war*. They attacked the Bosnian Serbs in 1995 with the aircraft, tactics, weapons, and operational tempos that they would have expected to employ against the Warsaw Pact seven years before, at the close of the cold war. That observation suggests several things about the flexibility of airpower. First, it implies that airpower's role in the sphere of low intensity conflict (LIC) continues to expand as new strategies, weapons, and sensor systems improve the ability of airmen to find and destroy important targets of all types under varying conditions. To the extent that a given LIC or operation other than war requires military surveillance and attacks (and most do), the DELIBERATE FORCE experience suggests that airpower is becoming an ever more equal partner with ground power. Moreover, the fact that ordinary air tactical units flew DELIBERATE FORCE speaks to the relative ease with which one may shift such units between conflicts, as compared to ground forces. Ground units often require months of training to prepare for the differing tactical tasks of various types of conflicts. Training a battalion for peace operations, therefore, can reduce its capabilities and availability for conventional

war. That is less often and less extensively the case for air units. Squadrons preparing for strike operations in Korea, for example, would not find strike operations over Bosnia much different in concept and basic technique; of course, they might find some adjustment for local conditions of geography and weather. Once again, one should not overstate this point. For example, airmen involved in DENY FLIGHT report that some of their specific battle skills, such as flying high-performance air combat maneuvers, degraded in the course of patrolling the skies over Bosnia for months on end. Moreover, the relative flexibility of surface forces, as compared to air forces, becomes a variable factor as one begins to look at specific missions and tasks—and at different branches, such as infantry and artillery.

This summary of the Balkans Air Campaign Study now turns to a final observation about the decisiveness of DELIBERATE FORCE's contribution to ending the conflict in Bosnia. In general, airpower was *a* decisive factor in ending the 1992–95 Bosnian conflict, but one must understand its specific contribution in relation to the state of the conflict and to other events unfolding in the region. Like all struggles, the Bosnian conflict was going to end some day. Either exhaustion or the victory of one side or the other would bring it to a close. The creation of the Bosnian Federation in March 1994 and the sudden successes of its forces in the spring and summer of 1995—in concert with those of Croatia—suggested that military dominance and victory were slipping, perhaps permanently, from the grasp of the Bosnian Serbs. Norman Cigar, a long-time analyst of the Balkans region, convincingly argues that some Bosnian Serbs and certainly Slobodan Milosevic realized that at the time.[118] Moreover, for domestic political reasons of his own, Milosevic needed the fighting to stop and, accordingly, tried to position himself as a peace broker in July.[119] Nevertheless, the long-term outcome of the conflict and its likely length still were not in sight at the end of August 1995. No one had solid reasons to think that the bloodshed in Bosnia would not continue for at least another campaign season or longer. Significantly, the Serbs were still advancing against the safe areas in eastern Bosnia, even as they gave up ground in the western areas. But the outside world had seen about as much butchery and mindless inhumanity in Bosnia as it could stand. To put it bluntly, they wanted the war to end—or at least to get off the Cable News Network. At the London conference in July, the interventionists announced that they intended to mitigate or, if possible, end the horror—by using airpower. And that's what DELIBERATE FORCE did. It did what three years of factional ground fighting, peacekeeping, and international diplomacy had yet to achieve. Almost at the instant of its application, airpower stopped the attacks on the safe areas and made further large-scale fighting over Bosnian territory largely pointless. In so doing, it drastically altered the military situation on the ground, and it gave the UN and NATO control of the pace and content of the peace process.

In summary, then, the present period of peace probably came to Bosnia in the following way: First, Bosnian Federation and Croatian ground advances in the spring and summer of 1995 gave the Serbs a long-term signal that their opportunities for further military gains were coming to an end. American diplomats interviewed by the BACS team suggested that the Federation advance also had the fortunate consequence of bringing the distribution of land under Federation and Serbian control almost exactly to the 51/49 percent split being called for at the time in UN and Contact Group peace plans.[120] This development probably influenced the peace calculations of several Serb leaders, but the diplomats generally agreed that its greatest value may have been to facilitate the final settlement at the Dayton peace talks in the following November. Second, the DELIBERATE FORCE air campaign "broke" the Serbs and was the proximal cause of the cessation of large-scale fighting in Bosnia and of the Serb agreement to participate in future peace talks according to a timetable set by the intervention. Third, the provision for a federal government in the peace plan made acquiescence to

UN and Contact Group demands more palatable for the Serbs. Since the Federation potentially offered them one of their dearest objectives—a degree of political autonomy—it seems reasonable that it lowered their willingness to fight on in the face of simultaneous NATO air attacks and ground offensives by their regional enemies. This last point requires further research, once it becomes possible to interview Bosnian Serb leaders on their views of the linkage between DELIBERATE FORCE and their political decisions. As one should expect in any conflict, then, the interventionist coalitions achieved their aim of stopping the fighting in Bosnia by blending diplomacy and military force, by plan and by happenstance, into a combination that simultaneously coerced the Bosnian Serbs and made it easier for them to give in to UN and Contact Group demands.

As a consequence, DELIBERATE FORCE ultimately impressed the BACS team as the creation of doctrinally and operationally sophisticated diplomats, air leaders, and planners. As they had done in the general case of DENY FLIGHT, NATO airmen crafted and executed the bombing campaign against the Bosnian Serbs in an optimal manner that accommodated the conflicting political, diplomatic, operational, and technological limitations and constraints of their situation. At the same time, many of the key forces and events that shaped the context and success of DELIBERATE FORCE were, in fact, beyond the control or the cognizance of even the senior planners involved. Like most, if not all, military operations, the outcome of DELIBERATE FORCE was the product of good planning, courage, and luck. Certainly, the campaign plan was not perfect in its conception and execution. Where possible, the BACS team tried to identify and describe its more important imperfections, all the while keeping in mind that hindsight does not guarantee a clear vision of what was or was not the best way to do something. In the main, however, the various team members tended to be more impressed by the success of the campaign than with possible errors of planning and execution.

The conclusion of this report, then, is that airpower delivered what it promised in DELIBERATE FORCE. It was a decisive element in bringing a new period of peace to Bosnia—quickly, cleanly, and at minimal cost in blood and treasure to the intervening states and, indeed, to the Bosnian Serbs. For the United States, if its national security strategy of global engagement is to last very long, its military forces will have to provide similar successes at similarly low costs—perhaps many times. It is useful to know, therefore, that in the case of Bosnia in mid-1995, airpower not only was the lead arm of American involvement in the region but also was almost certainly the only politically viable offensive arm available for use by the United States and any of its partners to end in a controllable way an ugly war of indeterminable cause and uncertain future. □

Notes

62. See Rick Atkinson's "Air Assault Set Stage for Broader Role," *Washington Post*, 15 November 1995, for an early published account of these events, which Admiral Smith expanded upon in his presentation of 9 November 1995. See also Leighton Smith, "Further Comments on 2d Draft of BACS," fax transmission, 2 August 1997, 2.

63. General Ryan has made these points numerous times, including during an interview with Lieutenant Colonel Owen and Lieutenant Colonel Sargent at Naples. See Lt Col Robert C. Owen, "Synopsis of Interview of General Michael Ryan, COMAIRSOUTH, AFSOUTH HQ, Naples IT, 1030–1200, Tuesday, 5 Dec 1995," AFHRA, BACS files.

64. AIRSOUTH, Fact Sheet, 2-8.

65. Gen Michael Ryan, Headquarters AIRSOUTH, Naples, Italy, interviewed by author and Lt Col Richard Sargent, 5 December 1995.

66. For this argument, see Col Trevor N. Dupuy, *A Genius for War*: The German Army and General Staff, 1807–1945 (New York: Prentice-Hall, 1977).

67. Maj Gen Charles D. Link, assistant deputy chief of staff, plans and operations (AF/XO), Headquarters USAF, discussion with author on the progress of the BACS study, 28 February 1996.

68. Richardson was outspoken in his praise of the leadership of General Ryan and General Hornburg, and in his amazement at how they sustained the workload they did. See Maj Mark Conversino, transcript of oral history interview by Col Douglas J. Richardson, Vicenza, Italy, 16 January 1996, AFHRA.

69. Maj Gen Michael C. Short, chief of staff, AIRSOUTH, Naples, Italy, interviewed by author, 4 December 1995.

70. Chap. 6. Information extracted is unclassified. The focus on Aviano was a product of the research time and resources available to the BACS team. Certainly, US naval forces and the air units of the other participating countries also have "stories to tell." But the BACS team had little time to reach out to those

forces, so the author decided early on to focus the team on Aviano and to rely on the US Navy and the other countries to report on their experiences and lessons learned from DELIBERATE FORCE.

71. Major Conversino expanded on this issue in BACS chap. 6, which is still classified.

72. Maj Gen Hal Hornburg, director, CAOC, interviewed by author et al., USAF Wargaming Institute, Maxwell AFB, Ala., 14 March 1996; and chap. 6.

73. Chap. 9. Information extracted is unclassified.

74. Hunter interview, tape 1, side A, index 1042–1100.

75. Smith, "Further Comments."

76. For details, see President William Clinton's press statement, "Establishing a Basis for Peace in Bosnia-Herzegovina," *U.S. Department of State Dispatch*, 11 September 1995, 679; and "More Talking, More Bombing," *Time Magazine*, 18 September 1995, 76–77.

77. Chap. 8.

78. For an early expression of Holbrooke's position, see Robert J. Guttman, "Richard Holbrooke," *Europe*, December–January 1994–1995, 12.

79. Steven Greenhouse, "U.S. Officials Say Bosnian Serbs Face NATO Attack If Talks Stall," *New York Times*, 28 August 1995, A1+.

80. Hunter interview, tape 1, side B, index 1114–1300.

81. Kevin Fedarko, "The Guns of August," *Time*, 14 August 1995, 44–46.

82. Karsten Prager, "Message from Serbia," *Time*, 17 July 1995, 24–25.

83. Norman Cigar, "How Wars End: War Termination and Serbian Decisionmaking in the Case of Bosnia," *South East European Monitor*, January 1996, throughout.

84. Holbrooke said that the relationship between the bombing, the land war, and diplomacy was an "accident." Negotiations were already under way when the bombing began in response to the Mrkale mortar attack. The conjunction of events "just happened." Holbrooke interview, tape 1, side A, index 064–080; see also "Silence of the Guns," *Time Magazine*, 25 September 1995, 41, for a journalistic discussion of the military dilemma presented to the Bosnian Serbs by the conjunction of the bombing and the land war.

85. Holbrooke interview, tape 1, side B, index 1534. See also Bruce W. Nelan, "Not-So-Rapid Response," *Time*, 19 June 1995, 30.

86. Christopher Hill, transcript of interview by author and Maj Mark McLaughlin, 27 February 1996, 4–5, AFHRA, BACS files.

87. Holbrooke interview, tape 1, side A, index 001–028, 135–40.

88. Richard Holbrooke, "Annals of Diplomacy: The Road to Sarajevo," *The New Yorker*, 21 and 28 November 1996.

89. Hill interview, 9.

90. Holbrooke interview, tape 1, side A, index 300–60; Hill interview, 9–10.

91. Holbrooke, "Annals of Diplomacy."

92. Hunter interview, tape 1, side A, index 2045–2120, 2245–3100.

93. Holbrooke interview, tape 1, side A, index 400–13; and idem, "Annals of Diplomacy."

94. Hunter interview, tape 1, side A, index 2045–2310.

95. Hill interview, 19.

96. Hunter interview, tape 2, side A, index 030–150.

97. Smith, "Further Comments."

98. Holbrooke interview, tape 1, side A, index 051–58.

99. Ibid., index 369–400, 484–500; and Hunter interview, tape 2, side A, index 800. The BACS team did not attempt to interview the domestic leaders of the NAC member states to determine if they also were prepared to ride out the political repercussions of a major collateral-damage incident.

100. Hunter interview, tape 1, side A, index 1550–95, 1800–1815, 2830–3000.

101. Col Douglas Richardson, director of operations, CAOC, said that this deliberation took place as an informal "hallway discussion" between him and "several" other senior CAOC leaders, who may have included Generals Sawyer and Hornburg. Interviewed by author and Lt Col Richard Sargent, 7 December 1995.

102. Admiral Smith reports that all of these options had drawbacks. In the cases of adding new option-one-and-two targets to the list or "revisiting" targets, Admiral Smith advised his commanders that there were not many left off the existing list that would have enough effect to be worth the risk to the aircrews to hit them. Consistent with the opinion of Ambassador Hunter and his own feedback from General Joulwan, Smith did not believe that there was any political support for striking option-three targets. See Smith, "Further Comments"; and Hunter interview, tape 1, side B, index 1026–1112.

103. Holbrooke, "Comments to 2d Draft of BACS," 2.

104. Gen Michael E. Ryan, discussion during interim briefing of BACS by Lt Col Robert C. Owen, USAFE/XO conference room, Ramstein Air Base, Germany, 24 August 1996.

105. Holbrooke, "Comments to 2d Draft of BACS," 2.

106. As an example of the permeability of NATO security in this issue, "More Talking, More Bombing," which was clearly written before the results of the meeting of 13–14 September were known, explicitly says that "the allies will run out of so-called Option 2 targets—as early as next week," and that a decision to move to option three presented NATO with "a problem."

107. Holbrooke interview, tape 1, side A, index 306–57; and Hill interview, 8.

108. Holbrooke interview, side A, index 104; and Hill interview, 17.

109. Capt Dave Miller, telephone interview by author, 21 March 1996, synopsis in AFHRA, BACS files. The other two liaison officers interviewed were Maj Kieth Yockey, who escorted the Croatians, and Maj Mark Dipadua, who escorted the Bosnian Croats and Muslims during the Dayton talks.

110. Steven T. Hosmer, *Psychological Effects of U.S. Air Operations in Four Wars, 1941–1991: Lessons for U.S. Commanders* (Santa Monica, Calif.: RAND, 1995), 198.

111. Holbrooke interview, side A, index 078.

112. At the time of this writing, the number of casualties caused by DELIBERATE FORCE remains uncertain. The BACS team received an unsolicited videotape, "US/NATO Bomb Serb Civilians, 9/95," reporting that civilian casualties and collateral damage were widespread and intentional. The origins of the tape, which is on file in the BACS archive at the AFHRA, are unclear, as is its usefulness as an indicator either of the truth or of general Bosnian Serb perceptions of the intent and impact of the air campaign. Ambassador Christopher Hill recounted to his BACS interviewers that President Milosevic told him that his investigation indicated that about 25 people died as a result of the bombing. Hill interview, 16.

This estimate conforms in magnitude with the findings of an investigation conducted by the Red Cross shortly after the bombing, which identified 27 civilian deaths and damage to civilian property as probably caused by the bombing. From the Red Cross's account, it appears that all of these deaths and damages were collateral consequences of attacks on other targets of military significance, including bridges, cantonment areas, a water reservoir, and a former Bosnian Serb field headquarters. International Committee of the Red Cross, "ICRC Report on Certain Aspects of the Conduct of Hostilities and the Consequences from a Humanitarian Point of View of NATO Air Strikes," November 1994, AFHRA, BACS files. What seems reasonable to say, then, is that the 1,026 weapons released during DELIBERATE FORCE killed fewer than 30 people.

113. Hunter interview, tape 2, side A, index 2835–2900.

114. Holbrooke, "Comments to 2d Draft of the BACS," 2. It is important to emphasize here that Holbrooke was responding to my initial analysis of this issue, so his assessment rises or

falls on the credibility and accuracy of my information and case. I would be responsible for any error that might later be proved or attributed to his position.

115. Hunter interview, tape 2, side A, index 113–75.

116. Smith, "Further Comments."

117. Gen Michael E. Ryan to Col Robert C. Owen, E-mail, subject: Further Comments on the Second Draft, 20 August 1997.

118. Cigar.

119. Ibid.

120. Hill interview, 19.